

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A gallium nitride compound semiconductor light-emitting diode comprising:

a substrate;

an n-type electrode region comprising an n-type transmissive electrode;

a gallium nitride compound semiconductor multilayer structure including an active layer; and

a p-type electrode region comprising a p-type transmissive electrode, wherein

the n-type transmissive electrode and p-type transmissive electrode are ~~thin films so~~ as to be substantially transparent, and

the p-type transmissive electrode and the n-type transmissive electrode transmit light which is generated in the active layer and reflected from the substrate so that light exits the light emission device.

~~the n-type transmissive electrode and p-type transmissive electrode are of a thickness of 30 nm or less.~~

Claim 2 (cancelled)

Claim 3 (previously presented): A gallium nitride compound light-emitting diode according to claim 1, wherein the n-type transmissive electrode is located outside of the p-type transmissive electrode.

Claim 4 (previously presented): A gallium nitride compound semiconductor light-emitting diode according to claim 1, wherein the n-type transmissive electrode is formed at least partially around a circumference of the p-type transmissive electrode.

Claim 5 (previously presented): A gallium nitride compound light-emitting diode according to claim 1,

wherein the gallium nitride compound semiconductor multilayer structure includes a buffer layer and an n-type gallium nitride compound semiconductor layer, and

wherein the n-type transmissive electrode is formed on a side face of the substrate, a side face of the buffer layer, and a side face of the n-type gallium nitride compound semiconductor layer in a region neighboring the buffer layer.

Claim 6 (previously presented): A gallium nitride compound semiconductor light-emitting diode according to claim 1, wherein the n-type electrode region further comprises an n-type pad electrode, and

wherein the p-type electrode region further comprises a p-type pad electrode.

Claim 7 (previously presented): A gallium nitride compound light-emitting diode according to claim 6, wherein the n-type pad electrode and the p-type pad electrode are provided substantially along one side of a light emitting face of the gallium nitride compound semiconductor light emission device.

Claim 8 (previously presented): A gallium nitride compound light-emitting diode according to claim 6, wherein the p-type pad electrode is formed in the vicinity of a center of a light emitting face of the gallium nitride compound semiconductor light emission device.

Claim 9 (previously presented): A gallium nitride compound light-emitting diode according to claim 1, wherein the n-type transmissive electrode comprises a thin metal film.

Claim 10 (previously presented): A gallium nitride compound light-emitting diode according to claim 6, wherein the n-type pad electrode is of a type which realizes a Schottky contact.

Claim 11 (previously presented): A gallium nitride compound semiconductor light-emitting diode according to claim 6, wherein the n-type pad electrode comprises at least one material selected from the group consisting of:

Pd/Au, Ni/Au, Pt/Au, Pd/Ni/Au, Pd/Al, Ni/Al, Pt/Al, and Pd/Ni/Al or an alloy comprising one or more materials selected from the above group.

Claim 12 (cancelled)

Claim 13 (cancelled)

Claim 14 (cancelled)

Claim 15 (currently amended): A gallium nitride compound semiconductor light-emitting diode comprising:

a substrate;

an n-type electrode region comprising an n-type transmissive electrode;

a gallium nitride compound semiconductor multilayer structure including an active layer;

and

a p-type electrode region comprising a p-type transmissive electrode, wherein

the n-type transmissive electrode and p-type transmissive electrode are films so as to be substantially transparent,

wherein the n-type transmissive electrode comprises a thick film of ITO, and

the p-type transmissive electrode and the n-type transmissive electrode transmit light which is generated in the active layer and reflected from the substrate so that light exits the light emission device.

~~the n-type transmissive electrode and p-type transmissive electrode are of a thickness of 30 nm or less.~~

Claim 16 (previously presented): A gallium nitride compound semiconductor light-emitting diode according to claim 4, wherein the n-type transmissive electrode is formed completely around the circumference of the p-type transmissive electrode.

Claim 17 (new): A gallium nitride compound semiconductor light-emitting diode according to claim 1, wherein the n-type transmissive electrode and p-type transmissive electrode are of a thickness of 30 nm or less.